REMARKS

The present Amendment amends claims 1 and 4-10 and cancels claims 2 and 3. Therefore, the present application has pending claims 1 and 4-10.

35 U.S.C. §112 Rejections

Claim 4 is rejected under 35 U.S.C. §112, second paragraph as failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is traversed for the following reasons. Applicants submit that claim 4, as now more clearly recited, is in compliance with the provisions of 35 U.S.C. §112.

35 U.S.C. §103 Rejections

Claims 1-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Patent Publication No. 2004/0003087 to Chambliss et al. ("Chambliss") in view of U. S. Patent 6,957,429 to Sekijima et al. ("Sekijima"). As previously discussed, claims 2 and 3 were canceled. Therefore, this rejection regarding claims 2 and 3 is rendered moot. This rejection regarding the remaining claims 1 and 4-10 is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claims 1 and 4-10, are not taught or suggested by Chambliss or Sekijima, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to an information processing

system, a control method of an information processing system, and a program to calculate load data in an information processing system as recited, for example, in independent claims 1, 5-7 and 9.

Claims 1 and 4

The present invention, as recited in claim 1, provides an information processing system. The information processing system includes an information processing apparatus which is used to operate a plurality of applications to request data input or output to or from a storage, and a management host which manages the storage. According to the present invention, the storage includes at least one port and at least one array group including a plurality of disk units. The information processing apparatus accesses, via the at least one port, a virtual area provided by the at least one array group. Also according to the present invention, the storage and the information processing apparatus constitute an access process section for processing an access request from an application. The access process section includes the at least one port and the at least one array group. Also according to the present invention, the information processing apparatus includes an access monitoring section which monitors an access request from the application and obtains information about the access request for each of the applications. The management host includes an acceptance section which accepts specification of a new application. The management host also includes a current load calculation section which calculates current amount of data accessed from the application to the storage for each of the applications based on information obtained by the access monitoring section. The management host further includes an estimated load calculation section which calculates each of an

estimated amount of data accessed from the application to the storage in the port and an estimated amount of data in the array group, in case of addition of the new application based on current amount of data calculated by the current load calculation section and based on information obtained by the access monitoring section. The management host also includes a load data output section which outputs each of an estimated amount of data in the port and an estimated amount of data in the array group calculated by the estimated load calculation section. The prior art does not teach or suggest all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Chambliss or Sekimima, whether taken individually or in combination with each other.

Chambliss teaches a method for improving performance in a computer storage system by regulating resource requests from clients. However, there is no teaching or suggestion in Chambliss of the information processing system as recited in claim 1 of the present invention.

Chambliss discloses a method and system for optimizing the performance of a storage system by classifying each client request for resources based on operational limits of the resources and controlling when to submit the request for processing based on service class. The operational limits are determined from performance characteristics of the system resources and from the level of performance guaranteed to each client. By regulating the clients' usage of resources using the resource operational limits, total system performance requirements and guarantees can be achieved.

One feature of the present invention, as recited in claim 1, includes a current load calculation section which calculates current amount of data accessed from the application to the storage for each of the applications based on information obtained by the access monitoring section. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches a current load calculation section, the Examiner cites paragraphs [0082] to [0083] (see rejection of canceled claim 2). However, neither the cited text nor any other portions of Chambliss teach the claimed feature. The Chambliss method classifies each client request for resources based on operational limits of the resources, and controls when to submit the request for processing based on service class. According to Chambliss, the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]), whereas, in the present invention, the current amount of data is calculated for each application. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of the current amount of data for each application, as in the present invention.

Another feature of the present invention, as recited in claim 1, includes an estimated load calculation section which calculates each of an estimated amount of data accessed from the application to the storage in the port and an estimated amount of data in the array group, in case of addition of the new application based on current amount of data calculated by the current load calculation section and based on information obtained by the access monitoring section. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches an estimated load calculation section, the Examiner cites paragraphs [0063] to [0071];

[0075]; and [0082] to [0083]. However, neither the cited text nor any other portions of Chambliss, teach or suggest the claimed features. Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, the present invention teaches where an estimated amount of data is calculated for each port, and an estimated amount of data is calculated for each array group. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of an estimated amount of data for each port and an estimated amount of data for each array group, as in the present invention. Accordingly, Chambliss is quite different from the present invention.

Therefore, Chambliss fails to teach or suggest "a current load calculation section which calculates current amount of data accessed from said application to said storage for each of said applications based on information obtained by said access monitoring section" as recited in claim 1.

Furthermore, Chambliss fails to teach or suggest "an estimated load calculation section which calculates each of an estimated amount of data accessed from said application to said storage in said port and an estimated amount of data in said array group, in case of addition of said new application based on current amount of data calculated by said current load calculation section and based on information obtained by said access monitoring section" as recited in claim 1.

The above noted deficiencies of Chambliss are not supplied by any of the other references of record, namely Sekijima, whether taken individually or in combination with each other. Therefore, combining the teachings of Chambliss

and Sekijima in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Sekijima teaches a service processing apparatus and a service execution control method. However, there is no teaching or suggestion in Sekijima of the information processing system as recited in claim 1 of the present invention.

Sekijima discloses an apparatus and method that presents a list of applicable services dynamically updated and enables users to specify selective combinations of the services. A client includes an input unit, a display unit, a user authentication unit, a service display and selection unit, a document set display and display unit, and the like. The service display and selection unit creates a list of currently active, applicable services and performs processing for user's service selection. The document set display and selection unit creates a list of documents included in a document set specified by a user and performs processing for user's document selection. In the servers, a service management unit, a selected service execution unit, service providing units, a document information management unit, a document storage unit, and a user information management unit operate respectively.

One feature of the present invention, as recited in claim 1, includes a current load calculation section which calculates current amount of data accessed from the application to the storage for each of the applications based on information obtained by the access monitoring section. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching a current load calculation section.

Another feature of the present invention, as recited in claim 1, includes an estimated load calculation section which calculates each of an estimated amount of data accessed from the application to the storage in the port and an estimated amount of data in the array group, in case of addition of the new application based on current amount of data calculated by the current load calculation section and based on information obtained by the access monitoring section. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching an estimated load calculation section.

Therefore, Sekijima fails to teach or suggest "a current load calculation section which calculates current amount of data accessed from said application to said storage for each of said applications based on information obtained by said access monitoring section" as recited in claim 1.

Furthermore, Sekijima fails to teach or suggest "an estimated load calculation section which calculates each of an estimated amount of data accessed from said application to said storage in said port and an estimated amount of data in said array group, in case of addition of said new application based on current amount of data calculated by said current load calculation section and based on information obtained by said access monitoring section" as recited in claim 1.

Claims 5 and 6

The present invention, as recited in claim 5, and as similarly recited in claim 6, provides an information processing system. The information processing system includes a storage which stores a database and includes at least one port and at least one array group including a plurality of disk units. The information processing

system also includes a plurality of information processing apparatuses which are used to operate an application requesting data input/output to/from the storage and access, via the at least one port, a virtual area provided by the at least one array group. The information processing system further includes a management host which manages the storage. According to the present invention, each of the information processing apparatuses includes a database management system which processes an access request from the application to the database and includes the at least one port and the at least one array group. The information processing apparatus also includes an access monitoring section which monitors an access request sent from the application to the database management system and obtains information about the access request. The information processing system further includes an access information output section which collects information about the access request and adds up the information correspondingly to the application. Also according to the present invention, the management host includes an acceptance section which accepts specification of a new application. The management host also includes a current load calculation section which calculates current amount of data accessed from the application to the storage for each of the applications based on information obtained by the access monitoring section. The management host further includes an estimated load calculation section which calculates each of an estimated amount of data accessed from the application to the storage in the port and an estimated amount of data in the array group, calculated by the current load calculation section and based on information obtained by the access monitoring section. The management host also includes a load data output section which outputs each of estimated amount of data in the

port and estimated amount of data in the array group calculated by the estimated load calculation section, and a configuration setup section which sets up a change in configuration of the storage based on the estimated amount of data calculated by the estimated load calculation section. The prior art does not teach or suggest all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Chambliss or Sekijima, whether taken individually or in combination with each other.

As previously discussed, Chambliss teaches a method for improving performance in a computer storage system by regulating resource requests from clients. However, there is no teaching or suggestion in Chambliss of the information processing system as recited in claims 5 and 6 of the present invention.

One feature of the present invention, as recited in claim 5, and as similarly recited in claim 6, includes a current load calculation section which calculates current amount of data accessed from the application to the storage for each of the applications based on information obtained by the access monitoring section. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches a current load calculation section, the Examiner cites paragraphs [0063] to [0071]; [0075]; and [0082] to [0083]. However, as previously discussed, Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, in the present invention, the current amount of data is calculated for each application. The calculation of

the current resource usage, as disclosed in Chambliss, is not the same as the calculation of the current amount of data for each application, as in the present invention.

Another feature of the present invention, as recited in claim 5, and as similarly recited in claim 6, includes an estimated load calculation section which calculates each of an estimated amount of data accessed from the application to the storage in the port and an estimated amount of data in the array group, calculated by the current load calculation section and based on information obtained by the access monitoring section. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches an estimated load calculation section, the Examiner cites paragraphs [0063] to [0071]; [0075]; and [0082] to [0083]. However, neither the cited text nor any other portions of Chambliss, teach or suggest the claimed features. As previously discussed, Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, the present invention teaches where an estimated amount of data is calculated for each port, and an estimated amount of data is calculated for each array group. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of an estimated amount of data for each port and an estimated amount of data for each array group, as in the present invention.

Therefore, Chambliss fails to teach or suggest "a current load calculation section which calculates current amount of data accessed from said application to said storage for each of said applications based on information obtained by said access monitoring section" as recited in claim 5, and as similarly recited in claim 6.

Furthermore, Chambliss fails to teach or suggest "an estimated load calculation section which calculates each of an estimated amount of data accessed from said application to said storage in said port and an estimated amount of data in said array group, calculated by said current load calculation section and based on information obtained by said access monitoring section" as recited in claim 5, and as similarly recited in claim 6.

The above noted deficiencies of Chambliss are not supplied by any of the other references of record, namely Sekijima whether taken individually or in combination with each other. Therefore, combining the teachings of Chambliss and Sekijima in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Sekijima teaches a service processing apparatus and a service execution control method. However, there is no teaching or suggestion in Sekijima of the information processing system as recited in claims 5 and 6 of the present invention.

One feature of the present invention, as recited in claim 5, and as similarly recited in claim 6, includes a current load calculation section which calculates current amount of data accessed from the application to the storage for each of the applications based on information obtained by the access monitoring section. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching a current load calculation section.

Another feature of the present invention, as recited in claim 5, and as similarly recited in claim 6, includes an estimated load calculation section which

calculates each of an estimated amount of data accessed from the application to the storage in the port and an estimated amount of data in the array group, calculated by the current load calculation section and based on information obtained by the access monitoring section. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching an estimated load calculation section.

Claims 7 and 8

The present invention, as recited in claim 7, provides a control method of an information processing system, where the system includes an information processing apparatus, which is used to operate a plurality of applications to request data input or output to or from a storage, and a management host that manages the storage. According to the present invention, the storage includes at least one port and at least one array group including a plurality of disk units. Also according to the present invention, the information processing apparatus accesses, via the at least one port, a virtual area provided by the at least one array group. The method includes steps of monitoring an access request from each of the applications, and obtaining information about the access request for each of the applications. The method also includes calculating current amount of data accessed from each of the applications to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. The method further includes accepting specification of a new application, and calculating an estimated amount of data accessed from each of the applications to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request.

Another step includes calculating each of an estimated amount of data in the port and an estimated amount of data in the array group in case of addition of the new application based on the calculated current data and information about the obtained access request. The method also includes a step of outputting the calculated each of the estimated amount of data in the port and the estimated amount of data in array group. The prior art does not teach or suggest all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Chambliss or Sekijima, whether taken individually or in combination with each other.

As previously discussed, Chambliss teaches a method for improving performance in a computer storage system by regulating resource requests from clients. However, there is no teaching or suggestion in Chambliss of the control method of an information processing system, as recited in claim 7 of the present invention.

One feature of the present invention, as recited in claim 7, includes calculating current amount of data accessed from each of the applications to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches calculating current amount of data, the Examiner cites paragraphs [0082] to [0083]. However, as previously discussed, Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the

contrary, in the present invention, the current amount of data is calculated for each application. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of the current amount of data for each application, as in the present invention.

Another feature of the present invention, as recited in claim 7, includes calculating an estimated amount of data accessed from each of the applications to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches calculating an estimated amount of data, the Examiner cites paragraphs [0082] to [0083]. However, neither the cited text nor any other portions of Chambliss, teach or suggest the claimed features. Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, the present invention teaches where an estimated amount of data is calculated for each port. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of an estimated amount of data for each port, as in the present invention.

Yet another feature of the present invention, as recited in claim 7, includes calculating each of an estimated amount of data in the port and an estimated amount of data in the array group in case of addition of the new application based on the calculated current data and information about the obtained access request. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches calculating an estimated of data, the Examiner cites paragraphs [0082] to [0083]. However, neither the cited text nor any other portions of Chambliss, teach

or suggest the claimed features. Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, the present invention teaches where an estimated amount of data is calculated for each array group. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of an estimated amount of data for each array group, as in the present invention.

Therefore, Chambliss fails to teach or suggest "calculating current amount of data accessed from each of said applications to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request" as recited in claim 7.

Furthermore, Chambliss fails to teach or suggest "calculating estimated amount of data accessed from each of said applications to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request" as recited in claim 7.

Further, Chambliss fails to teach or suggest "calculating each of an estimated amount of data in said port and an estimated amount of data in said array group in case of addition of said new application based on said calculated current data and information about said obtained access request" as recited in claim 7.

The above noted deficiencies of Chambliss are not supplied by any of the other references of record, namely Sekijima, whether taken individually or in combination with each other. Therefore, combining the teachings of Chambliss and Sekijima in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the

claims.

As previously discussed, Sekijima teaches a service processing apparatus and service execution control method. However, there is no teaching or suggestion in Sekijima of the control method of an information processing system as recited in claim 7 of the present invention.

One feature of the present invention, as recited in claim 7, includes calculating current amount of data accessed from each of the applications to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching calculating current amount of data.

Another feature of the present invention, as recited in claim 7, includes calculating an estimated amount of data accessed from each of the applications to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching calculating an estimated amount of data.

Yet another feature of the present invention, as recited in claim 7, includes calculating each of an estimated amount of data in the port and an estimated amount of data in the array group in case of addition of the new application based on the calculated current data and information about the obtained access request. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching calculating an estimated amount of data.

Therefore, Sekijima fails to teach or suggest "calculating current amount of

data accessed from each of said applications to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request" as recited in claim 7.

Furthermore, Sekijima fails to teach or suggest "calculating estimated amount of data accessed from each of said applications to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request" as recited in claim 7.

Further, Sekijima fails to teach or suggest "calculating each of an estimated amount of data in said port and an estimated amount of data in said array group in case of addition of said new application based on said calculated current data and information about said obtained access request" as recited in claim 7.

Claims 9 and 10

The present invention, as recited in claim 9, provides a program for calculating load data in an information processing system. The system includes an information processing apparatus that is used to operate a plurality of applications to request data input or output to or from a storage, and a management host that manages the storage. According to the present invention, the storage includes at least one port and at least one array group, which includes a plurality of disk units. Also according to the present invention, the information processing apparatus accesses, via the at least one port, a virtual area provided by the at least one array group. The program is tangibly embodied on a machine-readable storage device, and the program includes a means for monitoring an access request from the application and obtaining information about the access request for each of the applications. The program also includes a means for calculating current amount of

data accessed from the application to the storage for each of the applications based on information about the obtained access request. The program also includes means for accepting specification of a new application. Also included in the program is means for calculating an estimated amount of data accessed from the application to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. The program further includes means for calculating each of an estimated amount of data in the port and an estimated amount of data in the array group in case of addition of the new application based on the calculated current amount of data and information about the obtained access request. The program also includes means for outputting the calculated estimated amount of data in the port and the estimated amount of data in array group. The prior art does not teach or suggest all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Chambliss or Sekijima, whether taken individually or in combination with each other.

As previously discussed, Chambliss teaches a method for improving performance in a computer storage system by regulating resource requests from clients. However, there is no teaching or suggestion in Chambliss of the program to calculate load data in an information processing system as recited in claim 9 of the present invention.

One feature of the present invention, as recited in claim 9, includes a means for calculating current amount of data accessed from the application to the storage

for each of the applications based on information about the obtained access request. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches a means for calculating current amount of data, the Examiner cites paragraphs [0082] to [0083]. However, as previously discussed, Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, in the present invention, the current amount of data is calculated for each application. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of the current amount of data for each application, as in the present invention.

Another feature of the present invention, as recited in claim 9, includes a means for calculating an estimated amount of data accessed from the application to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. Chambliss does not disclose this feature. To support the assertion that Chambliss teaches a means for calculating an estimated amount of data, the Examiner cites paragraphs [0082] to [0083]. However, neither the cited text nor any other portions of Chambliss, teach or suggest the claimed features. Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, the present invention teaches where an estimated amount of data is calculated for each port. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of an estimated amount of data for each port, as in the present invention.

Yet another feature of the present invention, as recited in claim 9, includes a

means for calculating each of an estimated amount of data in the port and an estimated amount of data in the array group in case of addition of the new application based on the calculated current amount of data and information about the obtained access request. Chambliss does not disclose this feature, and the Examiner provides no support for the assertion that Chambliss discloses this feature. Nonetheless, Applicants submit that there are no portions of Chambliss that teach or suggest the claimed features. Chambliss teaches where the current resource usage is calculated for each service class (see, e.g., paragraphs [0082] to [0083]). To the contrary, the present invention teaches where an estimated amount of data is calculated for each array group. The calculation of the current resource usage, as disclosed in Chambliss, is not the same as the calculation of an estimated amount of data for each array group, as in the present invention.

Therefore, Chambliss fails to teach or suggest "means for calculating current amount of data accessed from said application to said storage for each of said applications based on information about said obtained access request" as recited in claim 9.

Furthermore, Chambliss fails to teach or suggest "means for calculating an estimated amount of data accessed from said application to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request" as recited in claim 9.

Even further, Chambliss fails to teach or suggest "means for calculating each of an estimated amount of data in said port and an estimated amount of data in said array group in case of addition of said new application based on said calculated current amount of data and information about said obtained access

request" as recited in claim 9.

The above noted deficiencies of Chambliss are not supplied by any of the other references of record, namely Sekijima, whether taken individually or in combination with each other. Therefore, combining the teachings of Chambliss and Sekijima in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

As previously discussed, Sekijima teaches a service processing apparatus and service execution control method. However, there is no teaching or suggestion in Sekijima of the program to calculated load data in an information processing system as recited in claim 9 of the present invention.

One feature of the present invention, as recited in claim 9, includes a means for calculating current amount of data accessed from the application to the storage for each of the applications based on information about the obtained access request. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching a means for calculating a current amount of data.

Another feature of the present invention, as recited in claim 9, includes a means for calculating an estimated amount of data accessed from the application to the storage for each of the applications, in case of addition of the new application based on information about the obtained access request. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching a means for calculating an estimated amount of data.

Yet another feature of the present invention, as recited in claim 9, includes a means for calculating each of an estimated amount of data in the port and an

estimated amount of data in the array group in case of addition of the new application based on the calculated current amount of data and information about the obtained access request. Sekijima does not disclose this feature, and the Examiner does not rely upon Sekijima for teaching a means for calculating an estimated amount of data.

Therefore, Sekijima fails to teach or suggest "means for calculating current amount of data accessed from said application to said storage for each of said applications based on information about said obtained access request" as recited in claim 9.

Furthermore, Sekijima fails to teach or suggest "means for calculating an estimated amount of data accessed from said application to said storage for each of said applications, in case of addition of said new application based on information about said obtained access request" as recited in claim 9.

Even further, Sekijima fails to teach or suggest "means for calculating each of an estimated amount of data in said port and an estimated amount of data in said array group in case of addition of said new application based on said calculated current amount of data and information about said obtained access request" as recited in claim 9.

Both Chambliss and Sekijima suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Chambliss and Sekijima in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 1 and 4-10 as being unpatentable over

Chabliss in view of Sekijima are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 1 and 4-10.

In view of the foregoing amendments and remarks, Applicants submit that claims 1 and 4-10 are in condition for allowance. Accordingly, early allowance of claims 1 and 4-10 is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 1213.43685X00).

Respectfully submitted,
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